

MINUTES

ADVISORY COMMITTEE FOR BIOLOGY AND MEDICINE

THIRTY-EIGHTH MEETING

held at

CANCER RESEARCH INSTITUTE

Boston, Massachusetts

June 26 and 27, 1953

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MINUTES

The thirty-eighth meeting of the Advisory Committee for Biology and Medicine was held at the Cancer Research Institute in Boston on Friday and Saturday on June 26 and 27, 1953.

Attendance Committee Members: Dr. Joseph T. Wearn  
Dr. Edward A. Doisy  
Dr. Gioacchino Failla  
Dr. Curt Stern  
Dr. Shields Warren

Staff of Division of Biology and Medicine and Atomic Energy Commission Dr. John C. Bugher  
Dr. Charles L. Dunham  
Dr. Paul B. Pearson  
Dr. Harold H. Plough  
Dr. Joseph Butts  
Dr. Paul G. LeFevre  
Dr. Bernard Nebel  
Mr. Howard C. Brown, Jr.  
Mr. James F. Haggerty  
Mr. Herbert A. Stanwood  
Mr. Douglas L. Worf  
Mr. John A. Derry  
Mrs. Frances R. Montgomery

Cancer Research Institute,  
New England Deaconess  
Hospital

Dr. Shields Warren, Scientific Director  
of the Institute welcomed the Committee

and the members of the staff of the Division of Biology and Medicine. He and his principal investigators conducted the group on a tour of the Institute, wherein the physical facilities were inspected.

Reports were made on the principal research programs which are under investigation and which are primarily concerned with acute radiation injury. Outstanding are the histopathological and histochemical studies with the new ultraviolet absorption color-translating microscope, the endocrine changes in parabiotic rats and the hematologic aspects of radiation injury. Emphasis is being placed

also on the pulmonary pathology resulting from the inhalation of particulate material, a subject of fundamental concern in the genesis of lung carcinoma.

Harvard Club

Upon conclusion of the morning session at the Institute, the group attended a luncheon at the Harvard Club, with Dean George P. Berry and Mr. Henry Meadow acting as hosts.

The other guests from the Harvard Medical School attending the luncheon included: Drs. A. K. Solomon, A. B. Hastings, Joseph Aub, Eugene Landis, Reidar Sognaes, K. V. Thimann, E. M. Purcell, William Sweet and Mr. Edward Reynolds.

Dean Berry briefed the group on the programs relating to radioactive materials now under investigation at the Harvard Medical School. He spoke of the Office of Naval Research, which in the beginning had generously supplied the funds to activate the research programs in basic, biochemical, physiological and medical problems. After the first year this financial support was taken over by the AEC, the funds flowing through ONR. Generally, however, this practice has now been discontinued and direct contracts are entered into between Harvard Medical School and the AEC. He reviewed the contributions of the Harvard Medical School to the Biology and Medicine program in training a number of investigators who later have gone into AEC laboratories, particularly to BNL. Dean Berry stated further that the investigations being carried on in the Biophysics Laboratory enabled a number of persons to get started in isotopes techniques at the Harvard Medical School and hospitals. He expressed his thanks to the AEC for their part in helping to establish active programs in medical research on all fronts.

The standing committee of the Faculty of  
Medicine of the Harvard Medical School is:

Dr. Joseph C. Aub - Professor of Research Medicine  
Dr. A. Baird Hastings - Hamilton Kuhn Professor of Biological Chemistry  
Dr. Eugene M. Landis - George Higginson Professor of Physiology  
Dr. John L. Oncley - Professor of Physical Chemistry  
Dr. Reidar F. Sognaes - Charles A. Brackett Professor Oral Pathology  
Dr. Arthur K. Solomon - Asst. Professor of Physiological Chemistry  
Dr. Shields Warren - Professor of Pathology at Harvard  
Mr. Henry C. Meadow - Assistant Dean  
Dean George P. Berry - Ex Officio - Overall Coordinator

Massachusetts General Hospital After the luncheon the group visited the  
Harvard Medical School

projects sponsored by the AEC at the  
Massachusetts General Hospital and the Harvard Medical School. The  
research group at the Massachusetts General Hospital is headed by Dr.  
Joseph C. Aub. His group, comprising a collection of scientific talent,  
is mainly interested in the investigation of biochemical effects of  
radiation at cellular and subcellular levels.

Much interest was displayed by the  
Committee in the work of Dr. William Sweet and his group on the external  
localization of brain tumors employing positron emitting isotopes such  
as radio arsenic. Dr. Sweet stated that he and his staff are working  
closely with the medical staff at the BNL on the neutron capture  
technique in the treatment of brain tumors.

It was the opinion of the Committee  
that the work underway at Harvard Medical School is basic research of top  
quality. The program falls into several distinct fields, each with its  
group leader. The biophysical laboratory, which provides many services  
functions to other parts of the University, has the largest single  
program using radioisotope techniques. Biochemistry is directed by

Dr. A. Baird Hastings, toxicity of radioactive substances by Dr. Joseph C. Aub, and special pathology by Dr. Shields Warren. The Committee was pleased to learn that in addition to the studies previously conducted on the effects of ingested radioisotopes, the Harvard group proposes to study radiation changes in human and experimental pulmonary tissues preliminary to more intensive work related to the effects of radioactive particles. It was agreed that more precise quantitative answers to questions pertaining to the effects of such inhaled particles are urgently needed.

The meeting adjourned at 5:30 P.M.

SATURDAY - 10:00 A.M.

Meeting Reconvened

The meeting was reconvened at Saturday at 10:00 A.M. with Dr. Wearn presiding. Dr. Wearn read into the record a letter received from Dr. Alan Gregg, former Chairman of the Committee, which was in response to a letter from Dr. Wearn, dated June 5, 1953. (See attachment to the Minutes of the meeting of the Advisory Committee for Biology and Medicine held at Chalk River, Ontario, Canada on May 8 and 9, 1953.)

Carmel by the Sea - June 11, 1953

"Dear Joe:

Please tell the members of the Advisory Committee for Biology and Medicine of the AEC that I never got a more heart-warming letter than the one you wrote on June 5th.

It had a good many statements that were news to me but the friendliness you all have shown me was reassuringly familiar and your kind wishes for the future make music, actively and retroactively.

I am profoundly as well as happily grateful to you all.

Yours sincerely,

Alan Gregg"

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Dr. Bugher reporting on matters relating to the Division of Biology and Medicine

Appointment of Dr. Charles H. Burnett

Dr. Bugher advised the Committee that

Dr. Charles H. Burnett, Professor of Medicine, University of North Carolina, had accepted the proffered appointment as a new member of the ACBM. The appointment will be processed upon notification of Dr. Burnett's clearance.

Chairman - ACBM

Dr. Bugher reported that Dr. Stakman was

willing to accept the Chairmanship of the Committee for one year from July 1, 1953 to July 1, 1954. He extended Dr. Stakman's regrets for his inability to be present at this meeting.

Dr. Bernard R. Nebel

Dr. Bugher introduced Dr. Bernard R.

Nebel as a new member of the Medical Branch. Dr. Nebel was formerly associated with the University of Rochester, where he served as Assistant Professor of Pediatrics. He came to this country from Germany where he obtained his PhD in 1925 from the University of Halle a.S. He worked in the field of cytogenetics and radiation at Cornell University Agricultural Experiment Station, Geneva, New York and in 1945 received his M.D. from the University of Rochester. Dr. Bugher advised the Committee that Dr. Nebel will be responsible for Industrial Medicine with special reference to research aspects and radiation biology as related to clinical medicine.

Test Operations

Dr. Bugher oriented the Committee on the

activities of the recent test operations which included the civil effects program. A full report on the Test Program is to be placed on the agenda

for discussion at the September meeting. He summarized the data regarding the livestock losses around the test site, and stated that studies on the etiology of the losses of the cattle and sheep may not be conclusive this year. In view of this fact, it is planned to set up research projects to make further studies at the University of Nevada and the Utah State Agricultural College. Faculty members working on the projects will include veterinarians, range management specialists, animal nutritionists and biochemists.

Biology and Medicine

Divisional Problems

The overall Divisional problems were discussed with particular emphasis on the budget. Dr. Bugher analyzed the functions of the Division of Biology and Medicine and said that he was hopeful that the work of the Division could continue as planned although the Commission had disapproved a request to permit an increase in personnel. In this connection, Dr. Bugher reported that a survey of the activities of the Division will be undertaken during July, 1953.

Minutes of Chalk River,  
Ontario, Canada  
May 8 and 9, 1953

Dr. Wearn presented for review the draft minutes of the Advisory Committee held at Chalk River, Ontario, Canada on May 8 and 9, 1953.

After a full reading several suggestions and corrections were offered. Specifically, it was suggested that the following item should be included in the minutes.

Film Badges, Chalk River

In connection with the film badges used on entering the classified area in Canada, individual photographs were taken of each person for the film badges. The badges were processed and returned to each individual within a few minutes. The suggestion was

made that the AEC might profit by making a survey of this procedure, inasmuch as there is such a delay in getting an individual picture badge at the Washington Office of the AEC.

The minutes will be reviewed again at the September meeting.

Research Program

The Committee reviewed the off-site

research program which now involves 370 contracts in over 150 institutions throughout the nation. Of this number <sup>100 of the programmatic type ~~of the~~ and the</sup> ~~there are approximately 264 contracts~~

*others* ~~which~~ are of the grant-like, joint-participation variety. In connection with this review, the problem of overhead contribution on grant-like contracts was again discussed. The previous deliberations on this problem were reported by Dr. Alan Gregg in his letter to Chairman Gordon Dean of February 6, 1953.

At this meeting, and after a full discussion, the Committee made the strong and unequivocal recommendation that all institutions receive uniform treatment and that there be a clear and workable AEC policy on overhead uniformly applied *to contracts of the grant ~~type~~ like joint participation nature*. See Addendum (1) - List of Projects.

Dr. Wearn's Retirement  
June 30, 1953

Dr. Wearn expressed his regrets upon his retirement. He said it had been a most

stimulating and educational experience for him to be a member of the Committee since September, 1947, and that he will continue to have the keenest interest in the work of the Commission and particularly in the Division of Biology and Medicine.

Next Meeting

It was voted to hold the next meeting at the Atomic Energy Commission in Washington, D. C. on Friday and Saturday, September 11 and 12, 1953.

Adjournment

The meeting adjourned at 12:00 Midnight.

Attachments

- (1) List of Projects
- (2) Ltr frm Acting Chairman Wearn to Chairman Strauss dtd July 20, 1953
- (3) Ltr frm Chairman Straus to Dr. Wearn dtd August 28, 1953